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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Patrick Boschet

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EXAMINER

WOLLSCHLAGER, JEFFREY MICHAEL

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

03/16/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/533,446	<b>Applicant(s)</b> BOSCHET ET AL.	
	<b>Examiner</b> JEFFREY WOLLSCHLAGER	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8,13-16,24,27-29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8,13-16,24,27-29 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1791

## **DETAILED ACTION**

### ***Election/Restrictions***

Newly submitted claim 34 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the composition could be employed in applications other than molding applications, such as a release layer protecting a layer in a laminate article prior to use.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 34 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Response to Amendment***

Claims 8, 13, 15, 16, 27-29 are currently amended. Claims 1-7, 9-12, 17-23, 25, 26, 30, 32, and 33 have been canceled. Claim 34 has been withdrawn from consideration. Claims 8, 13-16, 24, 27-29, and 31 are under examination.

### ***Claim Objections***

Claim 29 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 24. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Art Unit: 1791

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8, 13-16, 24, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckberg et al. (US 5,650,453) in view of Braley (US 2,811,408).

Regarding claims 8 and 16, Eckberg et al. teach a solvent-free UV curable epoxy silicone based liquid release composition (Abstract) comprising epoxy polydimethylsiloxane (col. 4, lines 12-18), an effective amount diaryliodonium salt as a catalyst (col. 5, lines 13-17; col. 8, lines 5-7), and vinyl ethers, including mixtures of vinyl ethers (col. 3, lines 19-26; col. 6, lines 38-62). The composition of Eckberg et al. comprises in one embodiment about 80 to 90 weight percent of the epoxy silicone, preferably 5 to 20 weight percent of the vinyl ethers, and an effective amount of catalyst, such as 0.5 to 3 parts of the catalyst (col. 6, line 63- col. 7, line 6). The claimed amounts of each component in the composition equate to a weight percent range of 83.3 - 92.5 weight percent epoxy polydimethylsiloxane, 0.4 - 7.6 weight percent diaryliodonium salt and about 7 - 9.1 weight percent of the vinyl ether. As such, Eckberg et al. disclose a

Art Unit: 1791

substantially overlapping range with the claimed values. Further, Eckberg et al. teach the release composition may be applied to metal (col. 7, lines 31-33). Eckberg et al. disclose 0.5 mil coatings (co., 13, line 52). Eckberg et al. do not teach applying the release composition to a metal mold. However, Braley teaches that it is known in the art to apply methylpolysiloxanes as release agents on metal molds (col. 1, lines 17-28).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the teaching of Eckberg et al. and Braley and to have employed the release composition of Eckberg et al. as a mold release coating on a mold, as suggested by Braley, since Braley teaches that methylpolysiloxanes are known to be well suited for use as release agents in metal molds.

As to claims 13 and 14, the composition of Eckberg et al. comprises in one embodiment about 80 to 90 weight percent, but as low as about 51 weight percent, of the epoxy silicone, preferably 5 to 20 weight percent of the vinyl ethers, but up to 49 weight percent, and in one embodiment about 0.5 to 3 parts of the catalyst (col. 6, line 63- col. 7, line 6). Further, Eckberg et al. teach employing an effective amount of catalyst (col. 3, lines 28-30; claim 1). As such, Eckberg et al. disclose a substantially overlapping range with the claimed values and suggest optimizing the levels of catalyst, as required, to achieve an effectively cured composition.

As to claims 15, 24, and 29, Braley teaches rubbing the mold surface with a swab/wipe saturated with the release composition (col. 2, lines 52-56). It would have been obvious to one having ordinary skill at the time of the claimed invention to have applied the composition of Eckberg et al. with the swabbing method set forth by Braley for the purpose of effectively applying a release composition to the surface of the mold in an art recognized manner.

Art Unit: 1791

Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckberg et al. (US 5,650,453) in view of Braley (US 2,811,408), as applied to claims 8, 13-16, 24, and 29 above, and further in view of Eckberg (US 4,256,870) and Lopes et al. (US 4,681,714).

As to claims 27 and 28, the combination teaches the method set forth above. Eckberg et al. '453 do not teach utilizing heat to polymerize the composition. However, Eckberg '870 (col. 4, lines 56-58; Table 1) and Lopes (Example 1; Table 1) disclose methods wherein silicone release compositions are polymerized with heat. Further, Eckberg '870 teaches a heat curing reaction can be initiated with radiation.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Eckberg et al. '453 and to have polymerized the composition with heat, as suggested Eckberg '870 and Lopes, since each of Eckberg '870 and Lopes, suggest heat it is an art recognized alternative method for curing silicone release compositions.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eckberg et al. (US 5,650,453) in view of Braley (US 2,811,408), as applied to claims 8, 13-16, 24, and 29 above, and further in view of Dmitroff (US 3,321,019).

As to claim 31, the combination teaches the method set forth above. Eckberg et al. do not teach molding a helicopter blade. However, Dmitroff teaches molding a composite fiberglass helicopter blade in a mold (col. 1).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have combined the teaching set forth in the combination and to have molded a helicopter blade, as suggested by Dmitroff, since Dmitroff suggests helicopter

Art Unit: 1791

blades can be produced in molds. One having ordinary skill would have found it obvious to have molded a wide variety of articles, including a helicopter blade, in order to realize the release advantages associated with the composition of Eckberg et al.

### ***Response to Arguments***

Applicant's arguments and the rule 1.132 declaration filed on December 18, 2009 and October 28, 2009 have been fully considered, but they are not persuasive. Applicant argues and it is declared that Eckberg et al. do employ a solvent whereas the instant invention does not employ a solvent. This argument is not persuasive. While Eckberg et al. certainly do employ a "diluent" it is noted that this "diluent" is the same as applicant's "anti-stick agent" that makes "the composition less tacky". It is unclear to the examiner how the material is to be considered a solvent when employed by Eckberg et al., but it is not to be considered a solvent when employed by applicant. Further, along the same line, Eckberg et al. similar to applicant, consider their material to be "solventless" except for the "diluent". The examiner submits that the declaration can not overcome these facts. As to molding with heat instead of UV radiation, the examiner notes that claim 8 is directed to the coated mold and that there is no evidence of record to suggest that the structure of the coated mold is different whether coated mold is cured with heat or UV radiation. Similarly, claim 16 does not make it clear that the method necessarily includes a positive, manipulative, heating step to cure the composition. In other words, within the context of the claim "is polymerized by heating" does not clearly require a heating step to polymerize the material and is reasonably understood to be a property of the material. The examiner has construed claims 27 and 28 to require a positive heating step and submits that the rejection of claims 27 and 28 as set forth above is proper. Further, it is noted that there is no evidence on the record to suggest that new or unexpected results are attributed to the method

Art Unit: 1791

of curing (i.e. heat vs. UV radiation). In fact, the instant application, published as US 2006/0255509, suggests both methods of curing are suitable (paragraph [0029]). The examiner submits the claims would need to be amended to overcome the rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY WOLLSCHLAGER whose telephone number is (571)272-8937. The examiner can normally be reached on Monday - Thursday 6:45 - 4:15, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Wollschlager/  
Primary Examiner  
Art Unit 1791

March 12, 2010